

ABSTRACT

A performance enhancing and force absorbing mouthguard adapted to fit the upper teeth of the mouth of an athlete wherein the mouthguard is quadruple or quintuple composite material of distinct materials. The first internal layer is a non-softenable flexible framework which will permit the mouthguard to hold its shape during fitting as well as to absorb and dissipate significant impact conveyed to the upper teeth. A hard, durable reverse bite plate wedge is thicker rearwardly and lowers the condyle from the temporomandibular joint in a fulcrum action to place the lower jaw in an optimum condition preventing impingement upon the nerves and arteries as well as spacing the upper and lower teeth apart. Elastomeric traction pads are on the bottom of the mouthguard and are grippingly engaged by the posterior teeth of the lower jaw. While the framework, wedge and traction pads are mechanically interlocked, a softenable material is placed over the mouthguard excepting the contact portions of the traction pads to encapsulate the mouthguard and to permit custom fitting.

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